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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/705,232	11/12/2003	Kevin Kremeyer	24847-017	3542	
75	90 02/13/2006		EXAMINER		
MCDERMOTT, WILL & EMERY			SWIATEK, ROBERT P		
600 13th Street, Washington, D			ART UNIT PAPER NUMBER		
<i>5</i> ,			3643		
			DATE MAILED: 02/13/200	DATE MAILED: 02/13/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

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		Application No.	Applicant(s)
Office Action Summary		10/705,232	KREMEYER, KEVIN
		Examiner	Art Unit
		Robert P. Swiatek	3643
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet with the c	orrespondence address
WHI( - Exte after - If NO - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DANSIONS of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Operiod for reply is specified above, the maximum statutory period we are to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).
Status			
1)⊠ 2a)⊠ 3)□	Responsive to communication(s) filed on <u>23 No.</u> This action is <b>FINAL</b> . 2b) This Since this application is in condition for allower closed in accordance with the practice under E	action is non-final. nce except for formal matters, pro	
Disnosit	ion of Claims	repute quayto, 1000 c.b. (1), 10	
5)⊠ 6)⊠ 7)□	Claim(s) 1-76 is/are pending in the application.  4a) Of the above claim(s) 1-28,36-42,50,51 and Claim(s) 29-35,43-49,53-58 and 60-66 is/are at Claim(s) 52, 59 is/are rejected.  Claim(s) is/are objected to.  Claim(s) are subject to restriction and/or	<u>f 67-76</u> is/are withdrawn from cor llowed.	nsideration.
Applicat	ion Papers		
9) <u> </u>	The specification is objected to by the Examine The drawing(s) filed on is/are: a) access Applicant may not request that any objection to the Replacement drawing sheet(s) including the correction The oath or declaration is objected to by the Ex	epted or b) objected to by the Edrawing(s) be held in abeyance. See on is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).
Priority (	ınder 35 U.S.C. § 119		
12)[_ a)l	Acknowledgment is made of a claim for foreign  All b) Some * c) None of:  1. Certified copies of the priority documents  2. Certified copies of the priority documents  3. Copies of the certified copies of the prior  application from the International Bureau  See the attached detailed Office action for a list of	s have been received. s have been received in Application ity documents have been received in (PCT Rule 17.2(a)).	on No ed in this National Stage
Attachmen			
2)	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa	

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## **DETAILED ACTION**

Applicant's arguments urging rejoinder of the withdrawn claims in this application are unpersuasive; the reasons set forth in the restriction requirement mailed 15 March 2005 and reiterated and made final in the Office action mailed 23 August 2005 are believed to be valid and not capricious. Accordingly, claims 1-28, 36-42, 50, 51, 67-76 stand withdrawn.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 52, 59 are rejected under 35 U.S.C. 102(b) as being anticipated by Schoppe (US 3,620,484: Ref. on sheet 1 of the Information Disclosure Citation filed 12 November 2003). The Schoppe patent discloses a device and method for reducing shock waves created by a body moving through a fluid; specifically, by a flying body moving supersonically through air. As shown in Figure 3 of Schoppe, a flying body 10 includes a narrow gas tube 20 extending forwardly into an airflow surrounding the body 10. Hydrogen gas 26 is forced through the tube 20, emerging from holes at the end of the pipe and subsequently being ignited by a spark plug device 34. Between the point of ignition and the forward surface of the body 10—along this short, extended path—heat and light are emitted, forming a volume of heated fluid that would expand outwardly, albeit narrowly, from the path. The heating of the fluid—air—would occur substantially instantaneously upon ignition of the hydrogen, and the slipstream would direct the

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burning air rearwardly and parallel to the direction of travel of the flying body. The heated cone

of fluid 30' (see Figure 4 of Schoppe), being of less density than the ambient air and enveloping

the forward extent of the flying body 10, consequently would produce less drag on the body.

The cross-sectional area of the fluid through which the cone 30' continuously passes is deemed

to constitute an "aerodynamic window."

Applicant's arguments filed 23 November 2005 have been fully considered but they are

not persuasive. Claims 52, 59 are not believed allowable for the reasons set forth above.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

Summary: Claims 1-28, 36-42, 50, 51, 67-76 have been withdrawn; claims 29-35, 43-49,

53-58, 60-66 have been allowed; claims 52, 59 have been rejected.

RPS: ②571/272-6894

6 February 2006

PRIMARY FXAMINER

Robert P. Swiatek

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